**2011 REGULAR SESSION**
**ACTUARIAL NOTE HB 495**

| House Bill 495 HLS 11RS-408 Enrolled<br><br>Author: Representative J. Kevin Pearson<br>Date: June 20, 2011<br><br>LLA Note HB 495.04<br><br>Organizations Affected:<br>Teachers' Retirement System of Louisiana<br><br>EN -$25,678,000 FC GF & LF EX | The Note was prepared by the Actuarial Services Department of the Office of the Legislative Auditor.<br><br>Paul T. Richmond<br><br>Paul T. Richmond, ASA, MAAA, EA<br>Manager Actuarial Services |
|---|---|

**Bill Header:** RETIREMENT/FUNDING: Relative to funding of state retirement systems, provides for changes in the remitting of payments on the Unfunded Accrued Liability (UAL)

**Cost Summary:**

| | |
|---|---|
| Actuarial Cost/(Savings) to Retirement Systems and OGB | $0 |
| Total Five Year Fiscal Cost | |
| Expenditures | $(102,578,000) |
| Revenues | $0 |

**Estimated Actuarial Impact:**

The chart below shows the estimated increase/(decrease) in the actuarial value of benefits, if any, attributable to the proposed legislation. Note: it includes the present value cost of fiscal costs associated with benefit changes. It does **not** include present value costs associated with administration or other fiscal concerns.

| Actuarial Cost (Savings) to: | Increase (Decrease) in The Actuarial Present Value |
|---|---|
| All Louisiana Public Retirement Systems | $0 |
| Other Post Retirement Benefits | $0 |
| Total | $0 |

**Estimated Fiscal Impact:**

The chart below shows the estimated fiscal impact of the proposed legislation. This represents the effect on cash flows for government entities including the retirement systems and the Office of Group Benefits.

| EXPENDITURES | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 5 Year Total |
|---|---|---|---|---|---|---|
| State General Fund | $ 0 | $ (24,057,000) | $ (25,678,000) | $ (25,907,000) | $ (26,936,000) | $ (102,578,000) |
| Agy Self Generated | 4,600 | 0 | 0 | 0 | 0 | 4,600 |
| Stat Deds/Other | 0 | 0 | 0 | 0 | 0 | 0 |
| Federal Funds | 0 | 0 | 0 | 0 | 0 | 0 |
| Local Funds | 0 | Incl Above | Incl Above | Incl Above | Incl Above | Incl Above |
| Annual Total | $ 4,600 | $ (24,057,000) | $ (25,678,000) | $ (25,907,000) | $ (26,936,000) | $ (102,573,400) |

| REVENUES | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 5 Year Total |
|---|---|---|---|---|---|---|
| State General Fund | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |
| Agy Self Generated | 0 | 0 | 0 | 0 | 0 | 0 |
| Stat Deds/Other | 0 | 0 | 0 | 0 | 0 | 0 |
| Federal Funds | 0 | 0 | 0 | 0 | 0 | 0 |
| Local Funds | 0 | 0 | 0 | 0 | 0 | 0 |
| Annual Total | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |

**Bill Information:**

**Current Law**

Under current law, three contribution rates are determined for Teachers' Retirement System of Louisiana each year – the employee contribution rate which is set by statute, the employer normal cost rate which is equal to the total normal cost minus the employee contribution rate, and the UAL cost rate also paid by the employer. The employer normal cost rate and the employer

UAL cost rate are both calculated under an assumption established by law that these contributions will be paid in the middle of the fiscal year on December 31.

As a general rule, the state pays required employer contributions based on the employer normal cost rate and the employer UAL cost rate directly to the retirement system for higher education employers. These contributions are made on average on December 31.

Also as a general rule, the state determines the Minimum Foundation Program block grant (MFP). This amount is paid from the Treasury to the Louisiana Department of Education (DOE). DOE then distributes the block grant to school districts. School districts combine the MFP with funds they receive from other sources. School districts pay employer contributions to TRSL from their general funds throughout the year. The average payment date for all contributions is on or about December 31.

**Proposed Law**

Beginning with the June 30, 2011 valuation for TRSL, which is used to determine contribution requirements for the 2012-13 fiscal year, employer contribution rate applicable to the UAL will be calculated assuming UAL contributions will be made at the beginning of the year rather than the middle of the year. The following rules will apply to this early payment program.

1. An employer may elect not to participate in the early UAL payment program. The system shall notify each employer of this option by March 1 preceding each fiscal year. To opt out, the employer must notify TRSL and the Treasurer of its election by April 1 of the year prior to the year that it wishes not to participate. For example, if an employer elects not to participate in the program for 2012-13, it must notify Treasury and TRSL by April 1, 2012 that is does not wish to participate.

2. TRSL will calculate two UAL employer contribution rates – one that will apply to employers electing to continue to make mid-year payments and the other for employer electing to make payments at the beginning of the year.

3. For employers participating in the program, the Treasurer will transfer the calculated employer UAL contribution directly to TRSL as soon after the beginning of the fiscal year as possible. Residual MFP amounts will be transfered from the Treasurer to the employer will be in equal periodic installments, no less frequently than monthly.

4. For employers not participating in the program, TRSL will receive employer UAL contributions in the same manner as under current law.

**Implications of the Proposed Changes**

The UAL rate applicable to employers participating in the program will be less than the UAL rate that will be charged to employers not participating in the program. The difference in the two UAL rates will reflects the additional amount the retirement system should earn because it has 6 more months to invest UAL contributions than it would have had otherwise.

**<u>Cost Analysis:</u>**

**Analysis of Actuarial Costs**

**Retirement Systems**

The underlying premise behind HB 495 is that, at the end of the day, Treasury and other governmental units will remove funds from their accounts, which are earning 2% to 3% per annum, six months earlier than they would have otherwise to deposit the funds with TRSL which will earn 8.25% per year (8.25% is the TRSL assumed rate of return). Based on the rates of return mentioned above, there is no actuarial cost to TRSL associated with the program to pay UAL contributions early.

**Other Post Retirement Benefits**

There is no actuarial cost associated with HB 495 for post-retirement benefits.

**Analysis of Fiscal Costs**

HB 495 will effect affect Treasury and other governmental entities that otherwise would have use of these funds. It affects them in two ways – first they will pay a smaller contribution (a gain) and second they will lose investment revenue (a loss). Contribution savings and investment losses, assuming all employers participate in the early payment program, are shown below for every year until the UAL is paid off. There will be no savings if no employers participate in the program.

**Table A**

| Fiscal Year | Savings from Reduced UAL Contributions | Losses from Reduced Investment Earnings | Net Savings |
|---|---|---|---|
| 2012-13 | $ (34,726,899) | $ 10,669,770 | $ (24,057,128) |
| 2013-14 | (37,066,094) | 11,388,484 | (25,677,611) |
| 2014-15 | (38,840,856) | 11,933,776 | (26,907,080) |
| 2015-16 | (38,883,191) | 11,946,783 | (26,936,408) |
| 2016-17 | (39,240,139) | 12,056,455 | (27,183,685) |
| 2017-18 | (40,878,868) | 12,559,951 | (28,318,917) |

| Fiscal Year | Savings from Reduced UAL Contributions | Losses from Reduced Investment Earnings | Net Savings |
|---|---|---|---|
| 2018-19 | (41,110,514) | 12,631,124 | (28,479,391) |
| 2019-20 | (41,346,794) | 12,703,720 | (28,643,074) |
| 2020-21 | (41,587,799) | 12,777,768 | (28,810,030) |
| 2021-22 | (41,833,624) | 12,853,298 | (28,980,326) |
| 2022-23 | (42,084,365) | 12,930,337 | (29,154,028) |
| 2023-24 | (42,340,121) | 13,008,918 | (29,331,203) |
| 2024-25 | (42,600,993) | 13,089,070 | (29,511,923) |
| 2025-26 | (42,867,082) | 13,170,826 | (29,696,256) |
| 2026-27 | (43,138,492) | 13,254,216 | (29,884,277) |
| 2027-28 | (43,415,331) | 13,339,274 | (30,076,057) |
| 2028-29 | (43,697,708) | 13,426,034 | (30,271,674) |
| 2029-30 | (29,296,548) | 9,001,306 | (20,295,242) |
| 2030-31 | (29,296,548) | 9,001,306 | (20,295,242) |
| 2031-32 | (29,296,548) | 9,001,306 | (20,295,242) |
| 2032-33 | (29,296,548) | 9,001,306 | (20,295,242) |
| 2033-34 | (29,296,548) | 9,001,306 | (20,295,242) |
| 2034-35 | (29,296,548) | 9,001,306 | (20,295,242) |
| 2035-36 | (29,296,548) | 9,001,306 | (20,295,242) |
| 2036-37 | (29,296,548) | 9,001,306 | (20,295,242) |
| 2037-38 | (29,296,548) | 9,001,306 | (20,295,242) |
| 2038-39 | (29,296,548) | 9,001,306 | (20,295,242) |
| 2039-40 | (19,176,350) | 5,891,895 | (13,284,455) |
| 2040-41 | 0 | 0 | 0 |
| Total | $ (1,007,800,697) | $ 309,644,758 | $(698,155,939) |

According to Treasury, rates of return on short term fixed income investments are currently about 1.85% and are projected to increase to about 2.80% in five years. We have assumed a rate of return of 2.5% in the preparation of Table A.

HB 495 will have the following effect on fiscal costs during the five year measurement period.

Expenditures:

- Expenditures from General Funds and from Local Funds will decrease by the amounts shown in Table A above.

Revenues:

- TRSL revenues (Agy Self Generated) will not change because although UAL contributions received will be less, the system will have the opportunity to invest these funds for 6 months longer than it would have otherwise. Assuming TRSL earns its assumed rate of return of 8.25%, the UAL contribution deposited at the beginning of the year will have grown to the UAL contribution that would have otherwise been made on December 31.

TRSL reports an estimated one-time administrative expense associated with HB 495 equal to $4,600.

**Actuarial Credentials:**

Paul T. Richmond is the Manager of Actuarial Services for the Louisiana Legislative Auditor. He is an Enrolled Actuary, a member of the American Academy of Actuaries, a member of the Society of Actuaries and has met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

**Dual Referral:**

**Senate**

☐ 13.5.1 ≥ $100,000 Annual Fiscal Cost

☐ 13.5.2 ≥ $500,000 Annual Tax or Fee Change

**House**

☐ 6.8(F)(1) ≥ $500,000 Annual Fiscal Cost

☐ 6.8(F)(2) ≥ $100,000 Annual SGF Fiscal Cost

☐ 6.8(G) ≥ $500,000 Annual Tax or Fee Change